

REMARKS/ARGUMENTS

1. Claims 1-5 are stated to be allowable.

Claim 6 is rejected under §103(a) as unpatentable over AAPA in view of the Iuoras et al. (Iuoras) patent. Examiner is thanked for clarification of the meaning of AAPA, which will be understood hereafter. The §103(a) basis for rejection is traversed, because there is no proper nexus for Examiner's suggested combination of AAPA with Iuoras.

More specifically, the Background of the Invention of the application recites

"While Asynchronous Transfer Mode protocols provide for bandwidth control by setting of one of the various EFCI, CI, and Relative rate bits of the Resource Management cells, existing spacecraft have simple switches which are incapable of setting bandwidth control bits. Because of cost considerations, even new spacecraft may not be equipped with switches which have bandwidth control bit setting capability.

It would be desirable to be able to extend ATM ABR service to spacecraft with simple switches."

Thus, the basis on which a person skilled in the art would follow the suggestion of the Background would exclude references to spacecraft in which the switches are capable of setting the bandwidth control bits for congestion control. Examination of the Iuoras patent reveals that its spacecraft does in fact use switches capable of setting the congestion control bits. As stated at column 6, lines 21-

56 of Iuoras

"Efficiency in supporting d [sic] traffic is ensured by subjecting the ABR traffic to congestion/flow control. ATM Forum has adopted rate-based schemes as standard for congestion control for ABR services. In a rate-based scheme the sources are provided with feedback information from the switches (reflecting their loading conditions), specifying the rates at which they can send their traffic. The ATM Traffic Management Specification V4.0 (TM4.0) defines strict rules concerning source and destination behavior, while for the switch behavior a few options are recommended and only coarsely specified. One of these options, namely the Explicit Rate Indication for Congestion Avoidance (ERICA) algorithm, has gained popularity in the past years, especially for terrestrial networks [see U.S. Pat. No. 5,805,577 entitled "ERICA: Explicit Rate Indication for Congestion Avoidance in ATM Networks" by Jain et al].

ERICA algorithm is concerned with fair and efficient allocation of network resources to all contending sources, while preventing buffer overflow and excessive loss (or delay) of packets. This is basically achieved by controlling transmission rates in order to reduce the flow of traffic entering the network. ERICA relies on monitoring of the cell arrival rates (as a primary metric) for ABR and higher priority traffic and the available capacity for ABR traffic, which is then used to periodically calculate (every averaging interval) the fair share and the Explicit Rate (ER) at which each terminal is allowed to send its traffic. The ERs (one for each ABR

virtual connection) are signaled to the sources by using Resource Management (RM) cells. . . ."

Thus, the Iuoras reference determines congestion at the switches in the spacecraft, and sets the Resource Management cells. This is what the AAPA excludes from the universe of technologies which should be looked to. Consequently, a person skilled in the art would bypass Iuoras when seeking art for combination with AAPR. This negates the possibility of a proper nexus for Examiner's suggested combination of AAPA with Iuoras. In the absence of a proper nexus for Examiner's suggested combination of references, the suggested combination cannot be made, and the §103 rejection fails.

Claim 6 is patentable in a 35 U.S.C. §103(a) sense over Examiner's suggested combination of references.

2. Minor corrections to the specification are made. It is believed that these errors and the correct language are self-evident from the context, and that no new matter is added.

3. Reconsideration and allowance are requested of claim 6, in addition to already-allowed claims 1-5.

4. No fee is believed to be required for this amendment. Please charge any other fees to deposit account 50-2061.

FOR THE APPLICANT(S)

by _____

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